

Title (en)  
LITHIUM SECONDARY BATTERY

Title (de)  
LITHIUM-SEKUNDÄRBATTERIE

Title (fr)  
BATTERIE SECONDAIRE AU LITHIUM

Publication  
**EP 1381106 A4 20080305 (EN)**

Application  
**EP 02720440 A 20020416**

Priority  
• JP 0203783 W 20020416  
• JP 2001117082 A 20010416

Abstract (en)  
[origin: EP1381106A1] To increase safety against overcharging of a lithium secondary cell which uses a lithium-nickel compound oxide as a positive electrode active material. A lithium secondary cell comprises a casing (2,3) and a lithium secondary cell element (1) using a lithium-nickel compound oxide as a positive electrode active material, accommodated in the casing. The specific surface area of the lithium-nickel compound oxide is from 0.1 to 10 m<sup>2</sup>/g, and a surface area capacity ratio S/C, i.e. a ratio of a cell surface area S (cm<sup>2</sup>) to a cell capacity (mAh), is from 0.05 to 5.  
<IMAGE>

IPC 1-7  
**H01M 10/40**; **H01M 2/02**; **H01M 4/62**

IPC 8 full level  
**H01M 2/02** (2006.01); **H01M 4/52** (2006.01); **H01M 4/525** (2010.01); **H01M 10/052** (2010.01); **H01M 10/0567** (2010.01); **H01M 10/0569** (2010.01); **H01M 10/36** (2010.01); **H01M 10/40** (2006.01); **H01M 50/124** (2021.01); **H01M 50/141** (2021.01); **H01M 4/02** (2006.01); **H01M 10/0565** (2010.01); **H01M 10/42** (2006.01); **H01M 50/126** (2021.01); **H01M 50/178** (2021.01); **H01M 50/55** (2021.01); **H01M 50/553** (2021.01); **H01M 50/562** (2021.01); **H01M 50/566** (2021.01)

CPC (source: EP US)  
**H01M 4/525** (2013.01 - EP US); **H01M 10/052** (2013.01 - EP US); **H01M 10/0567** (2013.01 - EP US); **H01M 10/0569** (2013.01 - EP US); **H01M 50/124** (2021.01 - EP US); **H01M 50/141** (2021.01 - EP US); **H01M 10/0565** (2013.01 - EP US); **H01M 50/126** (2021.01 - EP US); **H01M 50/178** (2021.01 - EP US); **H01M 50/55** (2021.01 - EP US); **H01M 50/553** (2021.01 - EP US); **H01M 50/562** (2021.01 - EP US); **H01M 50/566** (2021.01 - EP US); **H01M 2004/021** (2013.01 - EP US); **H01M 2010/4292** (2013.01 - EP US); **H01M 2300/0085** (2013.01 - EP US); **Y02E 60/10** (2013.01 - EP)

Citation (search report)  
• [A] JP H10162830 A 19980619 - DOWA MINING CO  
• [A] US 5294499 A 19940315 - FURUKAWA NOBUHIRO [JP], et al  
• See references of WO 02084777A1

Cited by  
EP1653548A1; US7482099B2

Designated contracting state (EPC)  
DE

DOCDB simple family (publication)  
**EP 1381106 A1 20040114**; **EP 1381106 A4 20080305**; CN 1275347 C 20060913; CN 1507667 A 20040623; US 2004076883 A1 20040422; US 6939644 B2 20050906; WO 02084777 A1 20021024

DOCDB simple family (application)  
**EP 02720440 A 20020416**; CN 02808254 A 20020416; JP 0203783 W 20020416; US 68328503 A 20031014